

Summary

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Thesis:

Development of library for generation of RSS (Really Simple Syndication) and RDF (Resource Description Framework) feeds, which to be integrated in WAP portals.

Annotation:

The optimal description and storage of the metadata becomes more and more crucial and necessary for achieving fast searching and effective presentation of the information stored in huge databases. This is also true for WEB and WAP based applications and portals.

Therefore we will research and present two of most popular formats used for metadata description. First one is RSS (Really Simple Syndication). RSS is a family of web feed formats used to publish frequently updated content such as blog entries, news headlines or podcasts.

The second one is RDF (Resource Description Framework) which is a family of [World Wide Web Consortium](http://www.w3.org/) (W3C) specifications originally designed as a metadata model but which has come to be used as a general method of modeling information, through a variety of syntax formats.

Development of a library that will be able to generate feeds based on these two formats is a huge challenge.

Goal:

Design and development of RSS and RDF feeds generation library are the main goals of this thesis. The library should provide efficient and easy to use interface for generating the feeds to be integrated in WAP portals.

The basic library requirements are:

- Develop a library providing handy and ready for use interface for RSS/RDF feeds generation.
- Generate sample RSS/RDF feeds using the library.
- Integrate the generated RSS/RDF feeds in a WAP portal.

Development is accomplished with the help of standard libraries and specifications, which will bring stability, flexibility and WEB and WAP compatibility.

Tasks:

- History and description of both RSS and RDF formats.
- Design – technical description and definition of all functional components of the library.
- Development – implementation and functional testing of the library.
- Integration – integration of RSS/RDF feeds generated by the library in WAP portals.

Structure:

The first chapter of the thesis is introductory. Also contains structure description of the thesis.

Second chapter contains used terms and technology description. Technical and design solutions and implementation are presented also. The chapter provides detailed RSS and RDF format description and WAP technology.

Third chapter is devoted to comparison with other already available solutions of the problem. There is also a short presentation of technologies used during development, like PHP, DOM and MySQL.

In chapter four I have described the way each component of the library is designed. It contains also the detailed description of development process and techniques used during this process.

“Testing and integration” is the title of the fifth chapter. It contains information about the design and development of the necessary test scripts and the software infrastructure for performing these tests.

The final chapter of the thesis contains information about future possibilities of library evolution.

Results:

The library provides opportunity for easy to use, efficient and stable interface for generation of RSS/RDF XML documents.

The development process was based on PHP and DOM. Using the object-oriented paradigm and structures that PHP provides, brings the development to a successful finish.

The library as a result from the goals defined for this thesis is based on latest technologies, which is basis for future improvement and evolution of the library.

Interesting future development task can be the implementation of the library using the Java programming language. This can bring more portability and platform independence of the library.